Tooele Chemical Agent Disposal Facility (TOCDF)

Request for a
CLASS 2 MODIFICATION
to the
TOCDF RCRA Permit

Request Number:	TOCDF-DVS-02-1012
Request Title:	Area 10 Drum Ventilation System for Secondary Waste
EPA ID Number:	UT 5210090002

For the:

STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

Division of Solid and Hazardous Waste (DSHW)

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1. DESCRIPTION OF CHANGE

REGULATORY BASIS AND CLASSIFICATION

This Resource Conservation and Recovery Act (RCRA) Permit Modification Request proposes to add three new miscellaneous units [two Drum Ventilation System (DVS) Enclosures and one Drum Ventilation System Sorting Room (DVSSR)] to the Permit as "permitted units" for the treatment of hazardous waste. The enclosures and sorting room will be *"...hazardous waste management unit[s] where hazardous waste is treated...and is not a [portable] container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, ...injection well..., containment building, [CAMU], [R&D Unit], ... or staging pile"* (i.e., 40 CFR 260.10 definition of *miscellaneous unit*).

The Drum Ventilation System consists of two separate and independent enclosures and one sorting room that will enable, while under constant engineered ventilation control,

1. various multiple secondary waste drums to be placed inside of them,
2. the drums to be punctured or perforated for internal headspace air monitoring for agent by the Automatic Continuous Air Monitor System (ACAMS),
3. the drums to be opened up by removal of their lids,
4. the contents of the drums to be sorted and characterized based on waste type, and
5. decontamination (i.e., hazardous waste treatment) of some of the drums' contents using a liquid decontaminant.

40 CFR 270.42 Appendix I does not explicitly address modifications related to the addition of new *miscellaneous units*, as it does for new *tank systems* and *container units,* which classifies such small (<25% increase) additions as Class 2 Permit modifications. Consequently, based on the similarity of this addition of miscellaneous units to the addition of a new tank system, and the new technological advancement of the DVS, this modification request is proposed as a Class 2 in accordance with 40 CFR 270.42(d)(2)(ii)(B), which is incorporated by Utah Administrative Code R315-3-4.3.

BACKGROUND

EG&G Defense Materials, Inc. operates the Tooele Chemical Disposal Facility (TOCDF) for the U.S. Army's Chemical Materials Agency (CMA), located in Stockton, Utah. TOCDF has completed the majority of its overall mission to destroy the portion of the U.S. Army's chemical weapons stockpile that resides at the Deseret Chemical Depot. In anticipation of completion of chemical weapons destruction, TOCDF is preparing to begin final closure activities, which include the elimination of "secondary wastes" that have been generated since the beginning of treatment of the DCD chemical weapons stockpile. Approximately 15,000 drums of secondary waste are stored at DCD Area 10 awaiting further treatment and/or disposal.

1. DESCRIPTION OF CHANGE (continued)

Much of the secondary waste generated over the course of the project has been declared hazardous, properly containerized, and returned to DCD Area 10 for storage. Examples of secondary wastes are 1) used personnel protective equipment, 2) potentially-contaminated tools and plant equipment, 3) trash associated with decontamination of tools, personnel and equipment, and 4) dunnage and packing materials.

Secondary wastes at TOCDF are assigned, in part, the waste code F999 because they have been determined to meet the intent of Utah Administrative Code (UAC) R15-2-10(e)(1) "*residues from demilitarization, treatment, and testing of ...chemical agents...*" However, in addition to F999, TOCDF has conservatively applied the waste code P999 "*nerve, military, and chemical agents*" to much of the secondary waste by virtue of the fact that it had been in direct contact with agent or simply within an agent-contaminated area of the plant, regardless of whether the waste actually was, or continued to be, contaminated with agent.

As a matter of procedure, rigorous surface decontamination practices have been used at TOCDF throughout the project for wastes that have potentially been exposed to agent. For example, a major portion of the secondary waste stockpile is used Demilitarization Protective Ensembles (DPE suits). The procedure for doffing of the DPE suits has always included rigorous surface decontamination of suits and area agent monitoring prior to removing the suits and containerizing them as hazardous waste. Consequently, a significant number of secondary waste containers that are currently in storage at DCD Area 10 have the P999 waste code applied to them and are thus excluded from disposal at a F999 hazardous waste disposal facility, even though the waste may not in fact be contaminated with agent.

As part of its strategy for eliminating secondary waste and reducing the amount of P999 secondary waste that ultimately must be treated onsite in the Metal Parts Furnace (MPF) or other units permitted for treatment of P999 waste, TOCDF intends to install two separate enclosures and one sorting room in DCD Igloo 1632.

DVS Enclosures

Each enclosure is sized large enough to completely encapsulate up to six individual 55-gallon drums (containers). The intent of the enclosures is to enable the vapor head space of the drums or the contents of the drums to be sampled for presence of residual chemical agent (e.g., VX, GB, Mustard, etc.) through the use of a specially-designed drum sampling device or removal of the lids, while keeping the drums within constant engineered ventilation control. Access to the drums' contents by removing the lids will enable sorting by waste type and accurate characterization. TOCDF also intends to perform decontamination (e.g., hazardous waste treatment) within the enclosures using an approved agent decontaminant. This decontamination activity constitutes a RCRA Permit-required hazardous waste treatment process that occurs within a *miscellaneous unit* as defined in 40 CFR 260.10.

DVS Sorting Room (DVSSR)

The DVSSR is to be sized large enough to enable entry by two facility personnel along with four individual 55-gallon drums (containers). Like the Enclosures, the intent of the DVSSR is to enable the vapor head space of the drums or the contents of the drums to be sampled for presence of residual chemical agent (e.g., VX, GB, Mustard, etc.) through the use of a specially-designed drum sampling device or removal of the lids, while keeping the drums within constant engineered ventilation control. Access to the drums' contents by removing the lids will enable sorting by waste type and accurate characterization. TOCDF also intends to perform decontamination (e.g., hazardous waste treatment) within the DVSSR using an approved agent decontaminant. As with the Enclosures, this decontamination activity constitutes a RCRA Permit-required hazardous waste treatment process that occurs within a *miscellaneous unit* as defined in 40 CFR 260.10.

1. DESCRIPTION OF CHANGE (continued)

DRUM VENTILATION SYSTEM DESCRIPTION

Refer to Enclosures 4.1, 4.2 and 4.3 of this request for drawings of the DVS Enclosures, the DVSSR, and their orientation within Igloo 1632. Figure 1 provides a schematic of the system, including the filtration system.

DVS Enclosures

Two separate and independent enclosures will be installed in DCD Area 10 Igloo 1632. Each enclosure will be sized to completely enclose up to six (6) 55-gallon drums of secondary waste and be equipped with six sets of glove ports and observation windows to enable manipulation of the enclosed drums. Non-powered conveyor rollers will simplify the movement of the drums into and out of the enclosures. In addition, a pass-through airlock will provide access to various tools and instruments. The interior floor basin "sump" of the enclosure will also provide a secondary containment volume for liquids. One additional set of glove ports will be installed near the sump discharge in order to perform maintenance activities associated with the sump.

The entire enclosure will be designed, fabricated and installed to withstand a negative pressure associated with an existing Igloo Carbon Adsorption Filtration system. Agent monitors will be installed to enable the agent-contamination status of the drum interior volumes to be determined.

DVSSR

One multi-compartmental enclosure will be installed in DCD Area 10 Igloo 1632, east of the DVS Enclosures. Two serial personnel airlocks will be provided as a means of limiting contamination similar to the Contamination Category A, B, and C concept in use within the Munitions Demilitarization Building (MDB). Hazardous waste drums will enter the sorting room directly through a sliding door/gate. The interior floor surfaces of each of the three compartments of the DVSSR (i.e., two airlocks and the sorting room) will be sloped toward a sump equipped with a sump pump. The floor of the sorting room will be sized to function as secondary containment.

The entire DVSSR will be designed, fabricated and installed to withstand a negative pressure associated with the existing Igloo Carbon Adsorption Filtration system. Agent monitors will be installed to enable the agent-contamination status of the drum interior volumes as well as facility personnel to be determined

Enclosure Ventilation

Igloo 1632 has previously been equipped (shared with Igloo 1631) with an Igloo Carbon Adsorption Filtration system in order to support the recently-completed Mustard TC Sampling Glovebox operations. Each of these two igloos (1631 and 1632) previously housed three-each such gloveboxes, all of which were "closed-vented" directly to the filtration system. During

operations, the Igloo Carbon Adsorption Filtration system drew a suction from the gloveboxes and filtered the air of particulates and vapors prior to discharge to the atmosphere. During the entire Mustard TC Sampling project, the activated carbon adsorption portion of the filtration system demonstrated its ability to effectively capture chemical agents.

The Mustard TC Sampling gloveboxes have been completely removed from Igloo 1632 in order to make room for the two DVS Enclosures and the DVSSR. The DVS Enclosures and DVSSR will be connected to the Igloo Carbon Adsorption Filtration system in the same manner as the gloveboxes were. Igloo Carbon Adsorption Filtration system procedures used during the operation of the Mustard TC Gloveboxes will continue throughout the secondary waste operations of the DVS Enclosures.

1. DESCRIPTION OF CHANGE (continued)

PERMIT LANGUAGE APPROACH

The RCRA Permit language will need to be modified to incorporate the following:

1. "Table of Contents" will be revised to generalize the *titles* of Module 8 and Attachment 14 from "Demilitarization Miscellaneous Treatment Units" to the less specific "Miscellaneous Treatment Units" since the DVS will represent the first miscellaneous treatment units not associated with formal demilitarization.

2. Module I "Standard Permit Conditions" will be revised to incorporate 24-hour reporting requirements in the event that agent has been confirmed in the Igloo Carbon Adsorption Filtration System stack, or the Permittee is unable to verify that an agent reading in the stack was a monitor anomaly. This requirement currently exists for the MDB Heating, Ventilation, and Air Conditioning (HVAC) Stack and the Common Stack.

3. Module VIII "Demilitarization Miscellaneous Treatment Units" will be revised to 1) change the Module title to "Miscellaneous Treatment Units", and 2) establish specific Permit Conditions relevant to the DVS enclosures, the DVSSR, and their filtration system. Allowable waste codes to be treated in the DVS will be limited at this time to agent (P999), treatment residue (F999), corrosive characteristic (D002), reactive characteristic (D003), and metals characteristics (D004 through D011) until a strategy is developed for the monitoring of the carbon beds for breakthrough of organics other than agents is developed.

4. Module X "Air Emission Standards for Equipment Leaks, Tanks, Containers, and the HVAC" will be revised to establish specific Permit Conditions relevant to the Igloo Carbon Adsorption Filtration System.

5. Appendix A "Acronyms And Abbreviations" will be revised to include "DVS" and "DVSSR".

6. Table 2 "Hazardous Wastes/Permitted Hazardous Waste Management Units (HWMUs)" will be revised to include the DVS Enclosures and the DVSSR as new HWMUs.

7. Attachment 5 "Inspection Plan" will be revised to include the inspection schedule for the DVS Enclosures and DVSSR Treatment Units in order to fulfill the following Permit Conditions:

   I.BB.2
   "[The Permittee shall maintain at the Facility, until closure....,] Attachment 5 (Inspection Plan) as required by R315-8-2.6 and this Permit"

   II.E.1
   "The Permittee shall follow Attachments 5 (Inspection Plan)..."

1. DESCRIPTION OF CHANGE (continued)

8. Attachment 5 "Inspection Log Sheets" will be revised to include an inspection log sheet for the DVS Enclosures and DVSSR in fulfillment of the following Permit paragraph:
   5.11.2
   "The Inspection Log Sheet Attachment to Attachment 5 contains the inspection logs used to document that the inspections occurred and to communicate the corrective actions (if any) that are required...."

9. Attachment 9 "Contingency Plan" will be revised to 1) describe the natural gas-powered electrical generator that provides emergency power to the Igloo Carbon Adsorption Filtration System, 2) describe the natural gas fuel supply, and 3) provide the plan-view figure showing fire suppression equipment and emergency exits. Attachment 9 "Contingency Plan is explicitly required per the following Permit Condition:
   I.BB.4
   "[The Permittee shall maintain at the Facility, until closure...,] Attachment 9 (Contingency Plan) as required by R315-8-2.7 and this Permit"

10. Attachment 14 "Demilitarization Miscellaneous Treatment Units" will be revised to 1) change the Attachment title to "Miscellaneous Treatment Units", and 2) include specific design and operating requirements to fulfill the following Permit Condition:
    VIII.D.1
    "The Permittee shall comply with the design and operating requirements specified in Attachment 14 (Demilitarization Miscellaneous Treatment Units) of the Permit."

TEMPORARY AUTHORIZATION TO BEGIN CONSTRUCTION ACTIVITES

Concurrent with this modification request, TOCDF is requesting temporary authorization (TA) pursuant to 40 CFR 270.42(e) to begin "construction" (i.e., installation and testing activities) associated with the DVS prior to the end of the 60-day post-submittal period. Neither the DVS Enclosures nor the DVSSR will be used for hazardous waste treatment under the requested TA.

§270.42(e)(2)(ii)(A), Activities to be Conducted Under the TA

Two DVS Enclosures and one DVSSR will be installed and tested in Igloo 1632. The installation of the DVS will be certified by a registered Professional Engineer prior to commencement of hazardous waste treatment activities. No hazardous waste treatment will be performed within the DVS Enclosures or DVSSR treatment units under the TA.

1. DESCRIPTION OF CHANGE (continued)

§270.42(e)(2)(ii)(B), Necessity of the Temporary Authorization

The DVS will be used for sorting, characterizing and treating of stored secondary waste that has been generated throughout various DCD agent operations. §270.42(b)(8) implicitly requires that construction (e.g., installation) of the DVS proceed a minimum of 60 days *after* the Class 2 Modification request is submitted for approval. TOCDF desires to proceed with the construction and installation of the DVS Enclosures and DVSSR *prior to* the end of the 60-day post-submittal period in order to "achieve...the objective [of preventing] a disruption of ongoing waste management activities".

§270.42(e)(2)(ii)(C), Continued Compliance to 40 CFR 264 Standards

The DVS consists of three independent treatment units (i.e., two enclosures and sorting room sized to enable personnel entry), which are permitted Miscellaneous Treatment Units. However, neither the DVS nor the associated filtration system will be used to perform hazardous waste treatment activities under the TA.

§270.42(e)(3)(ii)(C), Objective of the Temporary Authorization

The objective of the TA is to prevent disruption of ongoing waste management activities. TOCDF is approaching the end of munitions destruction and will be beginning closure activities, which will include the destruction of the secondary wastes that are stored at DCD Area 10. The strategy for disposal of the secondary waste will include inspection and monitoring of hazardous waste for characterization and consolidation. The DVS will enable the stored secondary waste drums to be safely and effectively monitored and/or opened up for inspection and sorting. In addition, the DVS will enable the treatment of the secondary waste for agent contamination by application of the decontaminant approved for the applicable agent type. The fabrication, construction, installation, testing and certification of the DVS Enclosures and DVSSR will require several months to complete. No hazardous waste will be treated in the DVS under this Temporary Authorization.

2. JUSTIFICATION FOR CHANGE

DVS Enclosures and Sorting Room

With the drum lid removed or the drum punctured, the drum may no longer constitute satisfactory primary containment of the enclosed hazardous waste. Strictly speaking, a stored hazardous waste container is exempted from the "primary containment" requirement when "...it is necessary to add or remove waste" [40 CFR 264.173(a)]. However, TOCDF has determined that due to the potentially acutely-toxic nature of the P999 hazardous waste, removing the lid for the purpose of monitoring the contents is above and beyond the intent of the "add or remove" exemption whereby emissions controls would not be required. In addition, a drum puncturing device, if used to gain access to the drum's interior, may be by its nature an induced leak as described in 40 CFR 264.173(b) and may invalidate the drums Department of Transportation packaging compliance status (e.g., the credited air emissions control). If used, a DOT-compliant puncturing device would retain the container's DOT-compliant status, thereby retaining the primary containment capability of the drum. In this case, the DVS Enclosures or DVSSR would ensure that secondary containment protection exists for the drums located within them.

Each DVS Enclosure's and DVSSR doors will be closed while open containers of hazardous waste are within it. Prior to removing hazardous waste containers from the DVS Enclosures or DVSSR, the containers' lids will be reattached, thereby ensuring that hazardous waste is safely contained throughout the entire sampling, treatment and sorting evolution. Each unit is designed, constructed and operated per the secondary containment requirements of 40 CFR 264.175.

"Permanent Total Enclosure"

The recordkeeping requirements of 40 CFR 264.1089 invoke specific design and operating criteria from the *air regulations* of 40 CFR 52.741, Procedure T *"Criteria for and Verification of a Permanent or Temporary Total Enclosure"*. The DVS Enclosures and DVSSR are thus required to qualify as "permanent total enclosures" in accordance with Procedure T, Section 4. In addition, the Permanent Total Enclosure status of the DVS Enclosures and DVSSR, as well as the compliance status of the ventilation system must be certified. This certification will be included as part of the Facility Construction Certification documentation of the enclosures.

2. JUSTIFICATION FOR CHANGE (continued)

Table 1 - Design and Operating Criteria 40 CFR 52.741 Appendix B, Procedure T	
"Procedure T" Criterium	Application of Criteria to the DVS Enclosures
4.1	The unit's (i.e., DVS Enclosures and DVSSR) must meet the criteria of 3.1, 3.3, 3.4, 3.5 (see below)
4.2	All VOCs must be captured and contained for discharge to the Igloo Carbon Adsorption Filtration system (verified by negative enclosure pressure).
3.1	The natural draft opening (NDO), which is the air inlet into the unit, must be at least 4 diameters away from the top of the drums (verified by measurement and calculation).
3.3	The NDO area must be smaller than 5% of the unit's total surface area (verified by measurement and calculation)
3.4	The average facial velocity of the air through the NDO must be at least 200 feet per minute *into* the unit (verified by initial measurement and streamers or smoke tube)
3.5	Both the main access door and one pass-through airlock door must be closed during routine enclosure operations. Likewise, the DVSSR personnel access doors and the feed gate must be closed during routine enclosure operations in the DVSSR (verified visually).

The principle of Procedure T is such that VOC capture efficiency of the *enclosure* need not be measured if all of the criteria are met [does not apply to the Carbon Adsorption Filtration system (the "*control device*")].

Enclosure Ventilation

40 CFR 264 Subpart CC imposes certain air emission standards for hazardous waste containers and other management units (e.g., Subpart X miscellaneous units). Rather than exempting the secondary waste containers from the air pollutant controls due to low Volatile Organic Compounds (VOCs), TOCDF will conservatively apply the air pollutant controls as though all secondary waste containers exceed the 500 ppm threshold for VOCs. As a result of this conservative approach, the VOC determination procedures of 40 CFR 264.1082 and 1083 do not apply since high VOC is assumed.

The required level of air pollutant controls prescribed in 40 CFR 264.1086 (i.e., "Subpart CC"). Generally, small volumes of hazardous waste such as 55-gallon drums require "Level 1" air-emission controls. Hazardous waste volumes larger than 121-gallons (0.46 m^3) generally require Level 1 OR "Level 2" air emission controls, depending on organic volatility. Level 2 controls are superior to Level 1 controls for effectiveness in controlling air emissions. Superior to Level 2 controls, "Level 3" control requirements are reserved for a specific treatment process (stabilization) and do not *explicitly* apply at TOCDF.

2. JUSTIFICATION FOR CHANGE (continued)

A properly-closed United States Department of Transportation (DOT)-compliant drum (per 49 CFR Parts 178 and 179) of hazardous waste meets the requirements of both Level 1 and Level 2 air emission controls. All *closed* drums stored in Igloo 1632 will credit their DOT-compliant status for air emission controls. The custom-designed and fabricated DVS enclosures, however, do NOT constitute DOT-compliant containers. Hence, simply closing the doors of the DVS enclosures does not meet the intent of Subpart CC.

In order to provide sufficient air pollutant emissions control for the DVS Enclosures and DVSSR, a closed-vent system will be installed that joins the DVS Enclosures and DVSSR directly with an emission control device in accordance with *Level 3* controls (superior to Level 2 controls) per 40 CFR 264.1086(e)(1)(i) and (e)(2)(ii). The closed vent system as well as the control device will be designed and operated in accordance with 40 CFR 264.1087.

Level 3 Air Emissions Controls Standards IAW 40 CFR 264.1087

The DVS Enclosures and DVSSR will meet the requirements for Level 3 air emissions controls through the use of a closed-vent system and non-regenerating carbon adsorption control device in accordance with 40 CFR 264.1087. Specifically, the carbon adsorption device is designed and operated to reduce the total organic (agent) content of the inlet vapor stream vented to the control device by *at least* 95 percent by weight [§264.1087(c)(1)(a)]. In addition, the effluent from the carbon will be monitored daily. The carbon must be replaced as soon as "breakthrough" is indicated [§264.1033(h)(1) via §264.1087(c)((3)(i)]. Igloo Carbon Adsorption Filtration system procedures used during the previous completed operation of the Mustard TC Gloveboxes will continue throughout the secondary waste operations of the DVS Enclosures and DVSSR. Such previous operations have proven the effectiveness of the system at removing chemical agents.

Regulatory Requirements for Subpart X Miscellaneous Treatment Units

The TOCDF RCRA Permit currently incorporates a total of eight (8) miscellaneous treatment units.

1. BDS-101, 102
2. MDM-101, 102, 103
3. PMD-101, 102
4. Air-Operated Remote Ordnance Access System (Projectile Cutter)

DVS-101 Enclosure, DVS-102 Enclosure, and the DVSSR will be added to the RCRA Permit to bring the total number of miscellaneous treatment units to eleven (11).

2. JUSTIFICATION FOR CHANGE (continued)

40 CFR 264.602 [incorporated by Utah Administrative Code (UAC) R315-8-16], "Monitoring, analysis, inspection, response, reporting, and corrective action – Miscellaneous Units" specifies compliance requirements for the DVS Enclosures and the DVSSR as miscellaneous treatment units:

> *"Monitoring, testing, analytical data, inspections, response, and reporting procedures and frequencies must ensure compliance with §§264.601, 264.15, 254.33, 264.75, 264.77, and 264.101..."*

In order to ensure compliance, the DVS Enclosures and DVSSR are evaluated in Table 2 below:

Table 2 - Requirements of 40 CFR 264 Subpart X

Citation	Title	Compliance
40 CFR 264.601 Prevention of releases to (a) subterrain, (b) surface, (c) air	Environmental Performance Standards – Miscellaneous Units	The DVS Enclosures and DVSSR will be located, designed, constructed, operated and maintained in a manner that will ensure protection of human health and the environment. Igloo 1632 has been previously evaluated and permitted as a hazardous waste container storage unit. In addition, the DVS Enclosures and DVSSR are designed to function as secondary containment for the liquid hazardous waste that will be placed inside of them. Air emissions from the DVS Enclosures and DVSSR will be closed-vented directly to a carbon adsorption filtration control device.
40 CFR 264.15	General Inspection Requirements	The DVS Enclosures and DVSSR will be added to the weekly general Environmental Inspection regimen as specified in the RCRA Permit, Attachment 5.
40 CFR 264.33	Testing and Maintenance of Equipment – Preparedness and Prevention	The entire TOCDF-operated Igloo 1632 is currently incorporated into the TOCDF Permit as a hazardous waste storage unit. The current preparedness and prevention arrangement with DCD will continue as is spelled out in the RCRA Permit. That is, emergency response to spills, facility communications, alarm systems, fire protection equipment, spill control equipment, and decontamination equipment will continue as is.
40 CFR 264.75	Biennial Reporting	Existing reporting requirements will continue to be complied with as specified in the RCRA Permit Modules I & II. The addition of the DVS Enclosures and DVSSR will result in the addition of 24-hour reportability for an agent release from the Igloo Carbon Adsorption Filtration System stack.
40 CFR 264.76	Unmanifested Waste Reporting	
40 CFR 264.77	Additional Reporting	
40 CFR 264.101	Corrective Action – Releases from SWMUs	Existing corrective action requirements will continue to be complied with as specified in the RCRA Permit Module VII.

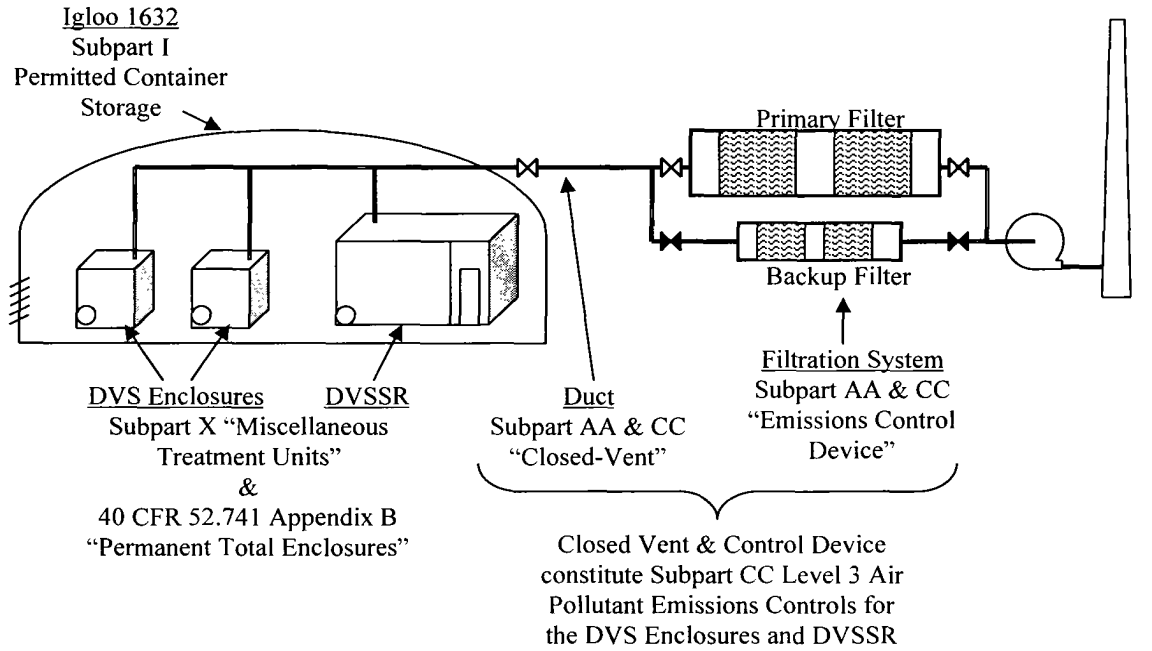
2. JUSTIFICATION FOR CHANGE (continued)

Facility Construction Certification (FCC)

In accordance with Standard Permit Condition I.S, The design and construction of the DVS is subject to the Facility Construction Certification (FCC) requirements for a Hazardous Waste Management Unit (HWMU), which includes final certification by a qualified, licensed professional engineer. The DVS will not be used for hazardous waste storage or treatment prior to explicit or implicit approval of the DVS compliance in accordance with Conditions I.S.2 and I.S.3.

As explained previously, certifications of 1) the DVS Enclosures' and DVSSR's status as "Permanent Total Enclosures" [§264.1089(d)] as well as 2) the compliance status of the DVS Enclosures, DVSSR, and the ventilation system [§264.1089(e)] will be included as part of the Facility Construction Certification documentation.

Figure 1 – Regulatory Status of DVS Components



2. JUSTIFICATION FOR CHANGE (continued)

IMPACT TO THE TOCDF

The installation of the DVS Enclosures and DVSSR and incorporation of them and the existent Igloo Carbon Adsorption Filtration system into the RCRA Permit will not adversely impact the ability of TOCDF to protect human health and the environment.

Environmental Impacts

The Igloo Carbon Adsorption Filtration system has proven to be effective at removing chemical agents from the previously-operated Mustard Ton Container Sampling Gloveboxes, although those sampling activities were not formal RCRA permit-required activities. The Mustard TC Sampling Gloveboxes have been removed entirely from Igloo 1632 to make room for the DVS Enclosures. Although the decontamination treatment activities to take place in the DVS Enclosures and DVSSR are in fact formal RCRA permit-required activities, the Igloo Carbon Adsorption Filtration system will perform the same function using the same procedures. The filtration system will continue to ensure Level 3 air pollutant emissions control. Secondary containment capacity of the DVS Enclosures and DVSSR will be ensured by their design, construction and operation.

TOCDF Personnel Impacts

Operation of the DVS Enclosures and DVSSR for sampling and decontamination will result in the continued activities of personnel who previously performed the Mustard TC Sampling. Since operation of the DVSSR will result in personnel actually entering the sorting room and opening drums of hazardous waste, there will be an increased use of personal protection equipment (PPE). There will be no overall significant increase in operations personnel activity as a result of the DVS Enclosure, beyond the temporary construction activities associated with the DVS installation.

Physical TOCDF Impacts

The installation of the DVS Enclosures and DVSSR, in conjunction with the Mustard TC Sampling Glovebox removal, results in no overall significant physical increase to the TOCDF.

3. PERMIT CHANGE PAGES

Change Pages in Permit Body

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Module VIII
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Module X
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Appendix A
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Attachment 5
Pages 4, 5, 7, 13 & 40

Attachment 5 Inspection Log Sheets
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Attachment 9
Pages 9, 13, 14, 51, 53, 54 & 112

Attachment 14
Cover page, pages 1, 3, 4, 5, 6, 7, 8 & 9

Changes to Permit Drawings

To be submitted as part of the follow-up Class 1 Modification Request